PROVIDENCE CITY Executive Staff Review Meeting Date: 03/22/2016

Request: Approval of the preliminary plat for Little Baldy Place Subdivision

Applicant: Stan Checketts	Agent: Danny Macfarlane		
General Plan: SFT (Sheet 5-C 2000 Master Plan	Zone: SFL		
Acres: 69.01 (+/-)	Number of Properties: 1 Proposed Lots: 38		
	8 8 6		

Staff Report Summary of Key Issues:

- 1. The minimum lot size in SFL is 20,500 sq. ft.
- 2. Providence City Code (PCC) 10-8-2 says: in areas that contain sensitive areas and hazard zoned (see Chapter 5 of this Title) Thirty percent (30%) of the lots can be less than the minimum lot size and/or reduced frontage width, but no lot can be less than 12,000 sq. ft. in the subdivision and the frontage requirement at the setback line must be the minimum for the zone.
- 3. The minimum lot width at the setback line in a SFL zone is 100 ft. (see PCC 10-8-1: Area Regulations)
- 4. The Developer has provided results from a water model for the area and the pressures are adequate for fire flow requirements.
- 5. The Developer has agreed to dedicate the property for a water reservoir.

FINDINGS OF FACT:

The following were used to review this plat:

- 1. PCC 10-5 Overlay Zones, including but not limited to:
 - a. PCC 10-5-2: Sensitive Areas
 - b. PCC 10-5-4: Hazard Slope Zone (HS)
 - c. PCC 10-5-6: Hazard Earthquake Primary Fault Zone (HE)
- 2. PCC 10-8 Area Regulations
- 3. PCC 11-3-2: Preliminary Plat
- 4. PCC 11-4 Design Standards

CONCLUSIONS OF LAW:

1. The preliminary plat meets the above requirements with the following conditions:

CONDITIONS:

- 1. The farthest point of every structure will need to be within 600 feet of a fire hydrant. For the east lots, fire truck access is required for any homes where the furthest corner of any structure (including accessory buildings) is more than 150 feet from where the fire truck is parked.
- 2. Table 2 Fire Flow and Allowable Structure Area from the Water Model and Fire Flow Summary must be recorded with the final plat.
- 3. The fault line needs to be verified.
- 4. Minimum lot widths need to be verified.
- 5. Show the buildable envelope on each lot.
- 6. Lot numbers on all pages need to be consistent.
- 7. Developer continues to meet all relevant federal, state, and local rules, laws, ordinances, etc.

RECOMMENDATION:

Executive Staff recommends the Planning Commission approve the preliminary plat for Little Baldy Place Subdivision based on the findings of fact, conclusions of law, and conditions listed above.

LITTLE BALDY PLACE SUBDIVISION PRELIMINARY PLAT

A PORTION OF SECTION 2, TOWNSHIP 11 NORTH, RANGE 1 EAST OF THE SALT LAKE BASE AND MERIDIAN, COUNTY OF CACHE, STATE OF UTAH

VICINITY MAP:

NTS



INDEX

Sheet Description Sheet Title

SHEET INDEX

PRELIMINARY PLAT

PRELIMINARY PLAT

PRELIMINARY PLAT

STREET PROFILE

SLOPE ANALYSIS

BASIS OF BEARING

EAST LINE OF SECTION 2 FROM THE EAST QUARTER CORNER TO THE SOUTHEAST CORNER AS SOUTH 00° 36' 22" WEST.

SUBDIVISION

C-100

C-101

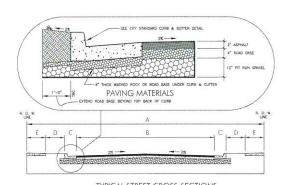
C-102

C-103

C-104

C-105





			Market Military	
		WIDTHS	6	
Δ	B	C 1	D	F

TYPE of STREET	WIDTHS					
	A RICHT-OF-WAY	B ASPHALT	CURB & GUTTER	D PARK STRP	E SIDEWAL)	
FEEDER STREET	56'	29'	2.5'	6.0"	5.0'	
COLLECTOR STREET	66'	39"	2.5'	6.0	5.0	
MAJOR STREET	80'	53'	2.5	6.0'	5.0	

TYPICAL ROAD CROSS-SECTION

BE DESIGNATED WITH THE HAZARD WILDFIRE OVERLAY ZONE, WITHIN THE HAZARD WILDFIRE OVERLAY ZONE:

3.5.

10-5-7: HAZARD WILDFIRE ZONES:

HE FOLLOWING SUGGESTIONS ARE MADE FOR LOTS IN THIS SUBDIVISION. HAZARDS SHALL

DEVELOPMENT SHALL PROVIDE FOR READY ACCESS TO FIRE AND OTHER EMERGENCY

DEVELOPMENT SHALL PROVIDE FOR READY ACCESS TO FIRE AND OTHER EMERGENCY EQUIPMENT TAND FOR ROUTES OF ESCAPE TO SAFELY HANDLE EVACUATIONS.

MEASURES TO MITIGATE WILDFIRE HAZARDS AND RISKS MAY BE REQUIRED BY THE APPROPRIATE LAND USE AUTHORITY BASED ON THE RECOMMENDATION AND REVIEW OF THE FIRE MARSHALL.

PROPERTY OWNERS ARE ENCOURAGED TO IMPLEMENT THE FOLLOWING.

3.1. CONSTRUCT THE ROOF WITH FIRE-RESISTANT MATERIALS LIKE TILE OR METAL. ASPHALT OR RISERIES, SHANGLES, CLEAN ROOF SURFACES AND GUTTERS OF PINE NEEDLES, LEAVES, BRANCHES, ETC. REGULARLY TO AVOID ACCUMULATION OF FLAMMABLE MATERIALS.

3.2. INSPECT YOUR PROPERTY REGULARLY, CLEARING DEAD WOOD AND DENSE VEGETATION FROM AT LEAST 30' AROUND YOUR HOUSE RAKE FILES OF LEAVES AND TWISS. IF ON A HILL, MORE SPACE WILL BE NEEDED TO PROTECT YOUR HOME. A FUEL BREAK SHOULD BE MAINTAINED AROUND ALL STRUCTURES.

A FUEL BREAK SHOULD BE MAINTAINED AROUND ALL STRUCTURES.
MOVE FIREWOOD AWAY FROM THE HOUSE OR ATTACHMENTS LIKE FENCES OR

DECKS.
COVER VENTS WITH WIRE MESH NO LARGER THAN 1/8 OF AN INCH TO KEEP SPARKS ROM ENTER YOUR HOME THROUGH VENTS.
DRIVEWAYS SHOULD BE WIDE ENOUGH FOR FIREFIGHTING EQUIPMENT TO

CURRENT ZONE 02-101-0001: SINGLE FAMILY LARGE

MINIMUM LOT SIZE: 20,500 SF CODE SECTION 10-8-2 SAYS, IN AREAS THAT CONTAIN SENSITIVE AREAS AND HAZARD COMED (SEE CHAPTER S OF THIS TITLE) THIRTY PERCENT (30%) OF THE LOTS CAN BE LESS THAN THE MINIMUM LOT SIZE AND/OR REDUCED FRONTAGE WIDTH, BUT NO LOT CAN BE LESS THAN TWELVE THOUSAND (12,000) SQUARE FEET IN THE SUBDIVISION AND THE FRONTAGE REQUIREMENT AT THE SETBACK LINE MUST BE THE MINIMUM FOR THE ZONE.

MINIMUM FRONTAGE (MEASURED AT SETBACK): 95

SETBACKS:
SIDE: 10
FRONT AND REAR COMBINATION: 50' (20 AND 30 COMBINATION)
ALL LOTS SUBJECT TO CURRENT SETBACK REQUIREMENTS AT TIME BUILDING PERMIT IS ISSUED.
PROPERTY OWNER/DEVELOPER:
STAN CHECKETTS, LC
P. 435,757,4282
CMIL ENGINEER:
CMIL ENGINEER:

DANNY MACFARLANE 540 WEST GOLF COURSE ROAD SUITE B1 PROVIDENCE, UT 84332 P. 435.213.3762

E: DANNY@CIVILSOLUTIONSGROUP.NET

 LAND SURVEYOR
 AA HUDSON AND ASSOCIATES
 TIM CHRISTENSEN P: 208.221.4144

TIMMAAHUDSON.COM ALL DRIVEWAYS SHALL BE AT LEAST 30' APART PER PROVIDENCE CITY

. LOT 14 IS TO BE SERVICED BY A PRIVATE DRIVE. THE CLEAR WIDTH HEIGHT ON THE PRIVATE

LOT 14 Is TO BE SERVICED BY A PRIVATE DRIVE. THE CLEAR WIDTH HEIGHT ON THE PRIVATE DRIVE MUST BE 13.5-FT.
 BOUNDARY SURVEY COMPLETED AND CERTIFED BY TIMOTHY CHRISTENSEN, REGISTERED LAND SURVEYOR IN THE STATE OF UTAH.
 THE STORM WAITER BASINS ARE TO BE OWNED AND MAINTAINED BY LOT OWNERS. THE TRAILS ARE TO BE MAINTAINED AND OWNED BY PROVIDENCE CITY.
 LOTS 21 AND 35 PROPERTY OWNERS WILL NEED TO ENTER INTO A MAINTENANCE AGREEMENT WITH THE CITY FOR STORM WATER.

LEGAL DESCRIPTION OVERALL SUBDIVISION

A PART OF THE NORTH HALF OF SECTION 11 AND SOUTH HALF OF SECTION 2, TOWNSHIP 11 NORTH, RANGE 1 EAST OF THE SALT

BEGINNING AT THE NORTHEAST CORNER OF SECTION 11, TOWNSHIP 11 NORTH, RANGE 1 EAST OF THE SALT LAKE BASE AND MERIDIAN, SAID POINT BEING MONUMENTED WITH A CACHE COUNTY SURVEYOR'S ALUMINUM CAP, AND RUNNING THENCE'S OD-31 38°E 2.680.94 REET ALONG THE AST LINE OF SAID SECTION TO THE EAST QUARTER CORNER OF SAID SECTION, SAID POINT BEING MONUMENTED WITH A CAHCE COUNTY SURVEYOR'S ALUMINUM CAP.

THENCE'S 89° 49'59° W 1266.42 FEET ALONG THE EAST-WEST QUARTER LINE OF SAID SECTION 11 TO AN EXISTING IRON PIPE THENCE NORTH OUT 35'29' WEST 505.71 FEET ALONG AN EXISTING FENCE LINE TO AN EXISTING FENCE CORNER AND REBAR. THENCE THE FOLLOWING COURSES ALONG THE SUBJOINSION BOUNDARY.

THENCE, N 03° 28' 28' E 96,74 FEET TO A POINT ON A 183.00 FOOT RADIUS NON-TANGENTIAL CURVE TO THE LEFT; THENCE 197.34 FEET ALONS THE ARC OF SAID CURVE (CHORD BEARS S 51°24'32' E 187.30 FEET, DELTA=61°47'24'); THENCE S 82° 24' 35' E 66.10 FEET; THENCE N 07' 35' 25' E 66.00 FEET;

ITERACE, IN U.7. 35. 25.15. BOUUTES!;
THENCE N.B.92.25.95.W. 64.05. FEET TO A POINT ON A 117.00 FOOT RADIUS TANCENTIAL CURVE TO THE RIGHT.
THENCE N.B.92.25.95.W. 64.05. FEET TO A POINT ON A 18.00 FOOT CURVE TO THE LEFT.
THENCE N.03.55.05.W. 148.05.1 FEET TO A POINT ON A 18.30.0 FOOT CURVE TO THE LEFT.
THENCE N.03.55.05.W. 148.05.1 FEET TO A POINT ON A 18.30.0 FOOT CURVE TO THE LEFT.
THENCE N.03.50.W. 148.05.1 FEET TO A POINT ON A 18.30.0 FOOT CURVE TO THE LEFT.
THENCE N.03.07.W. 17.5.F. 76.0 FEET TO A POINT ON A 18.30.0 FEET TO A POINT ON THE LEFT.
THENCE N.03.07.W. 17.5.F. 76.0 FEET TO A POINT ON THE LEFT.

THENCE N D4* 03*31* W 56.00 FEET.

THENCE N B9*56 50* C1 92.27 FEET TO A POINT OF A 9.00 FOOT RADIUS CURVE TO THE LEFT;

THENCE N B9*56 50* C1 92.27 FEET TO A POINT OF A 9.00 FOOT RADIUS CURVE TO THE LEFT;

THENCE 13.16 FEET ALONG THE ARC OF SAID CURVE (CHORD BEARS N 47* 03* 16* E 12.02 FEET, DELTA=83*47*09*) TO A POINT ON A 333.00 FOOT RADIUS CURVE TO THE LEFT;

THENE 108.77 FEET ALONG THE ARC OF SAID CURVE (CHORD BEARS N 14* 31* 09* E 108.29 FEET, DELTA=18*42*54*) TO A POINT ON A 232.00 FOOT RADIUS CURVE TO THE LEFT;

THENCE 78.57 FEET ALONG THE ARC OF SAID CURVE (CHORD BEARS N 58* 58* 03* W 539.76 FEET, DELTA=165*41*17*). TO A POINT ON A 333.00 FOOT RADIUS CURVE TO THE RIGHT;

THENCE 40.89 TEET ALONG THE ARC OF SAID CURVE (CHORD BEARS N 82* 28* 03* W 572.92, DELTA=118*41*18*) TO A POINT ON A 987.00 FOOT RADIUS CURVE TO THE LEFT;

THENCE 40.91 FEET ALONG THE ARC OF SAID CURVE (CHORD BEARS N 27* 30* 46* W 40.87 FEET, DELTA=08*46*44*) TO A POINT ON A 9.00 FOOT RADIUS CURVE TO THE LEFT;

THENCE 40.91 FEET ALONG THE ARC OF SAID CURVE (CHORD BEARS N 81* 01*20* W 13.61 FEET, DELTA=08*46*44*) TO A POINT ON A 9.00 FOOT RADIUS CURVE TO THE LEFT;

THENCE 18.43 FEET ALONG THE ARCUS SAID CURVE (CHORD BEARS N 81° 01'20' W 13.61 FEET, DELTA=98°14'25");
THENCE 15.43 FEET ALONG THE ARCUS FAID CURVE (CHORD BEARS N 81° 01'20' W 13.61 FEET, DELTA=98°14'25");
THENCE, N 40° 10' 32' W 55.00 FEET;
THENCE, N 40° 10' 32' W 55.00 FEET;
THENCE, N 40° 51' 28' Y 13.63 FEET TO A POINT ON A 9.00 FOOT RADIUS CURVE TO THE LEFT;
THENCE, N 49' 51' 28' Y 13.63 FEET TO A POINT ON A 9.00 FOOT RADIUS CURVE TO THE LEFT;
THENCE, N 48' 51' 28' Y 13.63 FEET TO A POINT ON A 9.00 FOOT RADIUS CURVE TO THE LEFT;
THENCE 15.43 FEET ALONG THE ARCUS FAID CURVE (CHORD BEARS N 68' 11' 06' W 180.82 FEET, DELTA=98°15'01') TO A POINT ON A 26'.00 FOOT RADIUS CURVE TO THE ARCUS FAID CURVE (CHORD BEARS N 68' 11' 06' W 180.82 FEET, DELTA=39°35'04');
THENCE, N 88' 34' 43' W 11.57 FEET,
THENCE, N 18' 10' 31' 03' W 68.05 FEET,
THENCE, N 18' 11' 47' PEZ 70' FEET TO A POINT ON A 329.68 FOOT RADIUS CURVE TO THE RIGHT;
THENCE 242.01 FEET ALONG THE ARCUS SAID CURVE (CHORD BEARS S 67' 10' 02' E 236.61 FEET, DELTA=42'03'31') TO A POINT ON A 9.86 FOOT RADIUS CURVE TO THE LEFT.

ON A 8,96 FOOT RADIUS CURVE TO THE LEFT; THENCE 13.17 FEET ALONG THE ARC OF SAID CURVE (CHORD BEARS S 88° 14' 59" E 12.02 FEET, DELTA=84°13'25"). THENCE, N 49° 51' 28" E 12.93 FEET; THENCE, S 44° 54' 49" E 56.19 FEET;

THENCE, S.44" 54' 49' E 56.19 FEET;
THENCE, S.49" 51' 128' W. 17.00 FEET TO A POINT ON A 9.00 FOOT RADIUS CURVE TO THE LEFT;
THENCE 13.17 FEET ALDING THE ARC OF SAID CURVE (CHORD BEARS S.07' 56' 37' W. 12.02 FEET, DELTA=83' 49'41') TO A POINT
ON A 330.65 FOOT RADIUS CURVE TO THE RIGHT;
THENCE 62.84 FEET ALDING THE ARC OF SAID CURVE (CHORD BEARS S.28' 31' 34' E 62.74 FEET, DELTA=10'53'20') TO A POINT ON
A 266.88 FOOT RADIUS CURVE TO THE LEFT.
THENCE 55.324 FEET ALDING THE ARC OF SAID CURVE (CHORD BEARS S.28' 28' 03' 6 459.37 FEET, DELTA=118'45'18') TO A
POINT ON A 337.37 FOOT RADIUS CURVE (CHORD BEARS S.28') 28' 03' E 459.37 FEET, DELTA=118'45'18') TO A
POINT ON A 337.37 FOOT RADIUS CURVE (CHORD BEARS S.28') 28' 03' E 459.37 FEET, DELTA=118'45'18') TO A

POINT ON A 337,97 FOOT FADIUS CURKE TO THE RIGHT;
THENCE 977.83 FEET ALONG THE ARC OF SAID CURVE (CHORD BEARS \$ 58° 58° 03° E 670,73 FEET, DELTA=165°46°18°) TO A
POINT ON A 265.68 FOOT RADIUS CURVE TO THE LEFT;
THENCE 77,73 FEET ALONG THE ARC OF SAID CURVE (CHORD BEARS \$ 15° 32' 13° W 77.45 FEET, DELTA=16°45′46°) TO A POINT
ON A 265.69 TO PAULY CURVE TO THE LEFT.

THEME: 7/7.3 FEET ALDING THE ARCH SAID CURVE (CHORD BEARS \$15'-32'-13'-W 17-45 FEET, DELTA=16'-49-46') TO A POINT ON A 5.01' FOOT RADIUS CURVE TO THE LEET.

THEME 15.43 FEET ALDING THE ARCH SAID CURVE (CHORD BEARS \$41'-55'-40' E 13.61 FEET, DELTA=98'-09'59');

THEME, E. SIGS'-44'-21'-E 56.19 FEET.

THEME, E. SIGS'-44'-21'-E 56.19 FEET.

THEME, E. SIGS'-55'-50'-W 12.30'-FEET TO A POINT ON A 9.00 FOOT RADIUS CURVE TO THE LEFT.

THEME, E. SIGS'-14'-21'-E 14.10'-STHE ARCH SAID CURVE (CHORD BEARS \$39'-49'-37'-W 13.61' FEET, DELTA=98'-14'27') TO A POINT ON A 267'-16'-FOOT RADIUS CURVE TO THE LEFT.

THENCE 381,15 FEET ALONG THE ARC OF SAID CURVE (CHORD BEARS S 50° 09' 50" E 349,64 FEET, DELTA=81°44'27").

THENCE, N 87'-40'-43" E 155.91 FEET.
THENCE, N 87'-40'-43" E 155.91 FEET.
THENCE, N 60'-02'-45" W 98.10 FEET TO A POINT ON THE NORTH LINE OF SAID SETION 11.
THENCE, S 89'-59' 22" E 915.90 FEET ALONG SAID NORTH LINE OF SECTION 11TO THE POINT OF BEGINNING.

CONTAINING 69.01 ACRES MORE OR LESS.

DESIGN ENGINEER'S CERTIFICATE

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PROVIDENCE | P: 435.213.3762 SALT LAKE CITY | P: 801.216.3192 info@civilsolutionsgroup.net www.civilsolutionsgroup.net

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WITH REGARDS TO HAZARDOUS SLOPE, BUILDING, WATER, ZONING SETBACKS. L 201/182

ENGINEER'S CERTIFICATE

I CERTIFY THAT I HAVE EXAMINED THIS PLAT AND FIND IT TO BE CORRECT AND IN ACCORDANCE WITH THE INFORMATION ON FILE IN THIS OFFICE AND THE CITY ORDINANCE.

CITY ENGINEER

APPROVAL AS TO FORM

APPROVED AS TO FORM THIS DAY OF

CITY ATTORNEY

COUNTY RECORDER'S NO. STATE OF UTAH, COUNTY OF CACHE, RECORDED AND FILED AT THE REQUEST

FILED IN: FILE OF PLATS COUNTY RECORDER

COUNTY SURVEYOR'S CERTIFICATE

I CERTIFY THAT I HAVE EXAMINED THIS PLAT AND FIND IT TO BE CORRECT AND IN ACCORDANCE WITH THE INFORMATION ON FILE IN THIS OFFICE AND FURTHER CERTIFY THAT IT MEETS THE MINIMUM STANDARDS FOR PLATS REQUIRED BY COUNTY ORDINANCE AND STATE LAW.

COUNTY SURVEYOR

PLANNING COMMISSION CHAIRMAN APPROVAL AND ACCEPTANCE

AND ACCEPTANCE

PRESENTED TO THE PROVIDENCE CITY PLANNING COMMISSION
CHAIRMAN THIS DAY OF A.D. 2015, AT WHICH
TIME THIS SUBDIVISION WAS RECOMMENDED TO THE CITY COUNCIL FOR
APPROVAL.

DATE PLANNING COMMISSION CHAIRMAN

MAYOR'S APPROVAL AND ACCEPTANCE

PRESENTED TO THE PROVIDENCE CITY MAYOR THIS DAY OF A.D. 2015, AT WHICH TIME THIS SUBDIVISION WAS APPROVED AND ACCEPTED.

CULINARY WATER AND SANITARY SEWER **AUTHORITY APPROVALS**

PLAT APPROVED BY PROVIDENCE CULINARY WATER AUTHORITY AND SANITARY SEWER AUTHORITY.

DATE

CULINARY WATER AND SANITARY SEWER AUTHORITY

OWNER'S CERTIFICATE

I THE APPLICANT AM THE OWNER, OR AM AUTHORIZED IN WRITING FOR



REVIEWED BY: ISSUED:

PROJECT #

DRAWN BY

THIS STAMP CERTIFIES THE BOUNDARY SURVEY

3.18.2016 No. 7233848-2202 DANEL Y MODRIANE STATE OF UTAH

742-1501

K. ALTHOUSE

D. MACFARLANE

3.18.2016

SHEET INDEX

THESE PLANS AND STEEDIFFATIONS ARE THE PROPRIETY OF DRUI, SOLUTIONS GROUP, INC. AND SHALL NOT BE PHOTOCORDED. BE SORWAN, OR LIES ON ANY DITHER PROJECT OTHER THAN THE PROJECT SPECIFICALLY DESIGNED FOR WITHOUT WHITTEN PERMASSION. THE OWNERS AND EMBRISHED FOR ALL, SOLUTIONS GROUP, INC. DESIGN, MAY AN URBHIT YER ANY OWNERS OR MODIFICATIONS MADE TO THESE PLANS GROUP TO BE SOLUTION. THEREON WITHOUT THEIR COMMENT.

Call 811 before you dig.

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www.bluestakes.org

1-800-662-4111

Know what's **below.**

LITTLE BALDY PLACE SUBDIVISION PRELIMINARY PLAT SCALE: 1"=80' MATCHLINE SEE SHEET C-102 ADDITIONAL CHARING 10 DE 1 SILDRES INTINO 30.00 4. EXISTINIS IRRIGATION PIPE TO REMAIN 5. NOT USED 6. PROPOSED SEVVER, WATER, STORM DRAIN, POWER, COMMUNICATION, AND GAS LINES TO TE INTO EXISTING 7. EXISTING FENCE TO BE REMOVED WITHIN PROPOSED ROADWAY 8. INISTALL STORM WATER DETENTION BASIN 10. INSTALL STORM WATER CATED HASIN 10. INSTALL TEMPORARY DETENTION BASIN WITH TEMPORARY STORM WATER ASSEMENT 11. SECTION OF EXISTING ACCESS EASEMENT WILL BE RE-ASSIGNED 12. EXISTING ACCESS EASEMENT 13. PROPOSED DOEN SPACE AND TRAILS TO BE MAINTAINED AND OWNED BY PROVIDENCE CITY 14. PROPOSED 50' WIDE COMBINIED PROPERTY ACCESS AND PUBLIC BONNEVILLE SHOPELINE TRAIL EASEMENT 15. PROPOSED BONNEVILLE SHORELINE TRAIL EASEMENT 16. EXISTING BONNEVILLE SHORELINE TRAIL 17. PROPOSED PHASE 2 LIMIT LINE 18. EXISTING BONNEVILLE SHORELINE TRAIL 17. PROPOSED PHASE 2 LIMIT LINE MATCHLINEL=77.73, n=265.68-101 L=15.43, R=9.00 L=977.83. R=337.97 L=108.77, R=333.00 L=786.57, R=272 184.47, R=267.00 24" EXIST

①SHEET KEY NOTES:

- INSTALL ASPHALT; 39' WIDTH; SEE CROSS SECTION DETAIL
- 1. INSTALL ASHMALT; 39 WIDTH; SEE CHASS SECTION DATAL SHEET C 100
 2. INSTALL STANDARD DUTY CONCRETE CROSS SECTION FOR COLLECTOR STREETS; SEE CROSS SECTION DETAIL SHEET C 100
 3. INSTALL 3' WIDE VALLEY GUTTER, AREAS WITH SLOPES EXCEEDING 30% (LOTS 36, 38, 39, AND 40) WILL REQUIRE ADDITIONAL GRADING TO GET SLOPES LESS THAN 30%
 4. EXISTING IRRIGATION PIPE TO REMAIN
 5. NOT USED.

- 16. EAST ING BUDINEVILLE POLICIEURE I PAUL
 17. PROPOSED PHASE 2 LIMIT LINE
 18. PROPOSED LIGHT POLE (TYP.)
 19. INSTALL PRESSURE REDUCING VALVE (PRV). UPSTREAM
 PRESSURE APPROXIMATELY 140 PSI. DOWNSTREAM PRESSURE
 APPROXIMATELY 80 PSI.

 10. DOWNSTREAM PSI.

 10. DOWN

GENERAL NOTES:

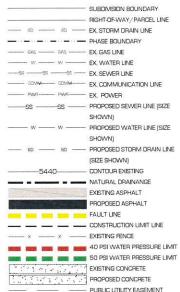
- 1. POWER AND COMMUNICATION LINES ARE ASSUMED TO BE CONTAINED WITHIN THE SAME TRENCH.
 2. STORM WATER WILL COLLECT IN GUTTERS ON THE SIDE OF EACH ROAD, BE COLLECTED IN STORM WATER INLET GRATE, AND BE CHANNELED TO THE NEAREST COLLECTION POND, AND THEN DRAINED AT A CONTROLLED RATE INTO THE CITY STORM WATER SYSTEM.

 3. ADDITIONAL ENGINEERING AND SITE GRADING MAY BE REQUIRED TO BUILD ON SLOPES GREATER THAN 20%. ALSO A CONDITIONAL USE PERMIT MAY BE REQUIRED.

 4. BY STAMFING THIS DOCUMENT THE ENGINEER VERIFES THAT ALL LOTS WILL HAVE AN ADEQUATE BUILDING, WATER, ZONING SETBACKS, ETC ON THE CONSTRUCTION DOCUMENTS AND FINAL PLAT.
- PLAT. ALL EXISTING POWER POLES TO REMAIN THE FAULT LINE IS SHOWN BASED UPON THE USGS ECOLOGICAL

- STUDY MAP.
 THE REMAINDER PARCELS TO BE FENCED AND GRAZED.
 LOTS 29, 30 AND 31 CANNOT HAVE ACCESS FROM 200 NORTH
 STREET.
- 9. CERTAIN AREAS ON THIS PLAT CANNOT BE LANDSCAPED OR BUILT ON.

LEGEND



PROPOSED LIGHT POLE

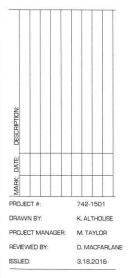
PROPOSED FIRE HYDRANT

— — BUILDING SETBACK BONNEVILLE TRAIL EASEMENT STORM DRAIN BASIN

solutionsgrouping

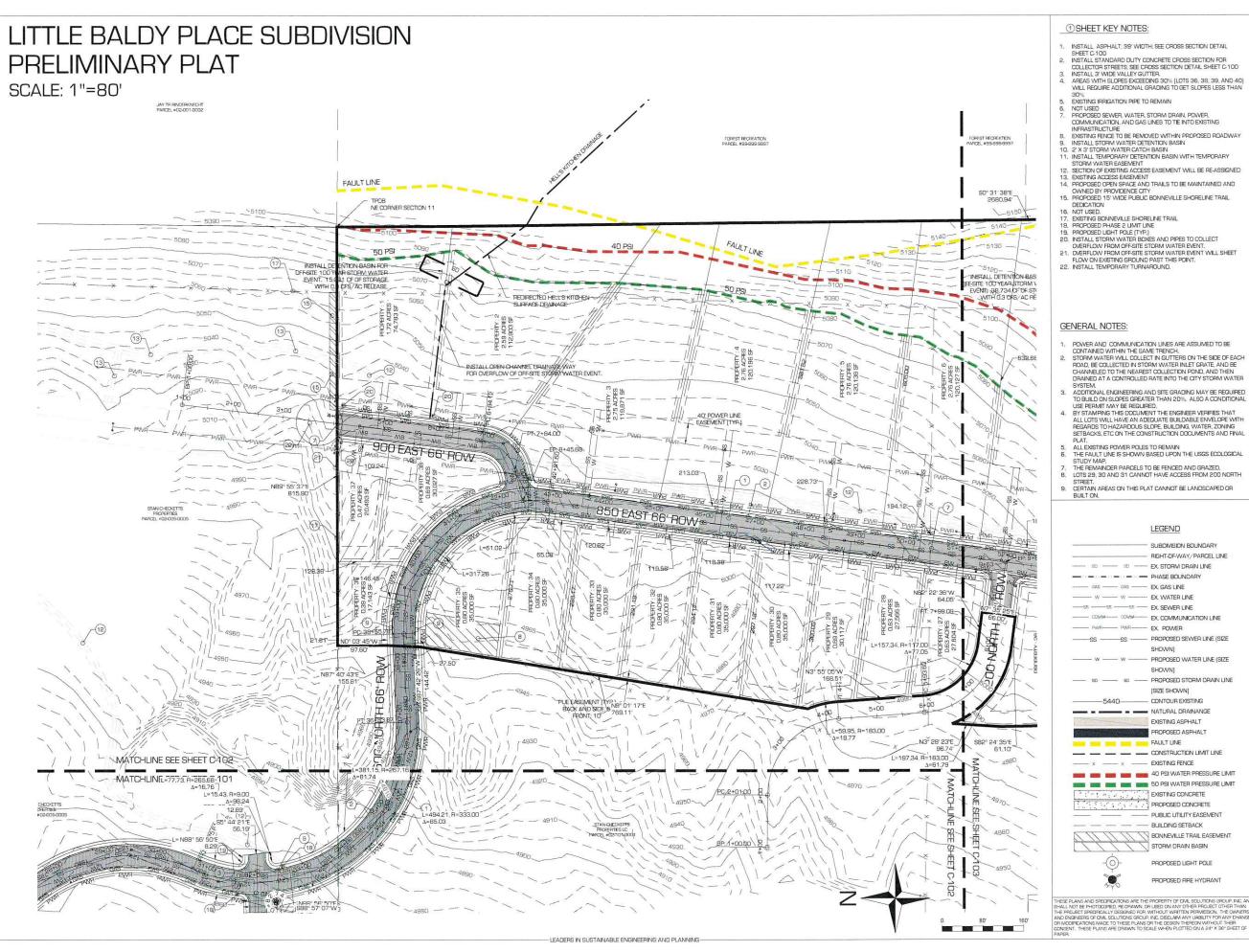
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SUBDIVISION ACE 63 급립 MAR BALDY MINARY PRELIM PROVIDEN





PRELIMINARY PLAT



1 SHEET KEY NOTES:

- INSTALL ASPHALT; 39' WIDTH; SEE CROSS SECTION DETAIL SHEET C-100
 INSTALL STANDARD DUTY CONCRETE CROSS SECTION FOR COLLECTOR STREETS; SEE CROSS SECTION DETAIL SHEET C-100
 INSTALL 3' WIDE VALLEY GUTTER.
 AREAS WITH SLOPES EXCEEDING 30% (LOTS 36, 38, 39, AND 40)
 WILL REQUIRE ADDITIONAL GRADING TO GET SLOPES LESS THAN 2006.
- 30% 5. EXISTING IRRIGATION PIPE TO REMAIN
- NOT USED
 PROPOSED SEWER, WATER, STORM DRAIN, POWER, COMMUNICATION, AND GAS LINES TO TIE INTO EXISTING
- INFRASTRUCTURE

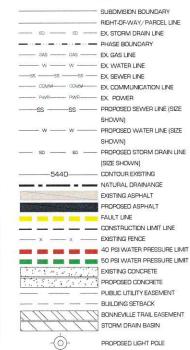
 8. EXISTING FENCE TO BE REMOVED WITHIN PROPOSED ROADWAY

GENERAL NOTES:

- POWER AND COMMUNICATION LINES ARE ASSUMED TO BE
- CONTAINED WITHIN THE SAME TRENCH.
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- SYSTEM.
 ADDITIONAL ENGINEERING AND SITE GRADING MAY BE REQUIRED TO BUILD ON SLOPES GREATER THAN 20%. ALSO A CONDITIONAL USE PERMIT MAY BE REQUIRED.
 BY STAMPING THIS DOCUMENT THE ENGINEER VERIFIES THAT ALL LOTS WILL HAVE AN ADEQUATE BUILDABLE ENVELOPE WITH REGARDS TO HAZARDOUS SLOPE BUILDING, WATER, SOWING SETBACKS, ETC ON THE CONSTRUCTION DOCUMENTS AND FINAL DILAT.

- PLAT.
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 THE FAULT LINE IS SHOWN BASED UPON THE USGS ECOLOGICAL
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LEGEND



PROPOSED LIGHT POLE

PROPOSED FIRE HYDRANT

Ciuii SUBDIVISION 2016 ACE 5 րող 급교 ある BALDY

OUP Inc.

solutionsgr

PROJECT #: DRAWN BY: REVIEWED BY: D. MACFARLANE

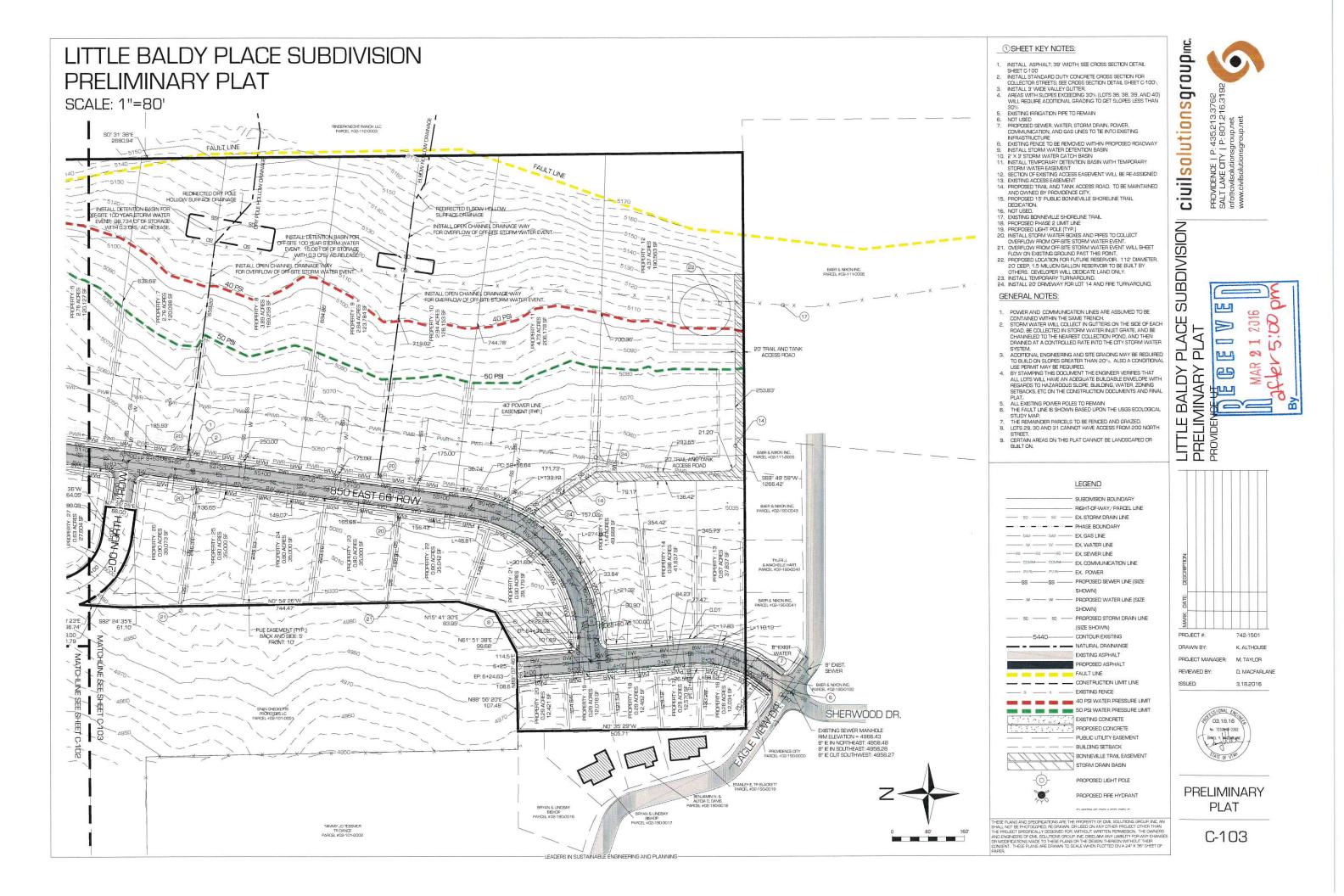
PRELIM PROVIDEN



3.18.2016

ISSUED:

PRELIMINARY PLAT

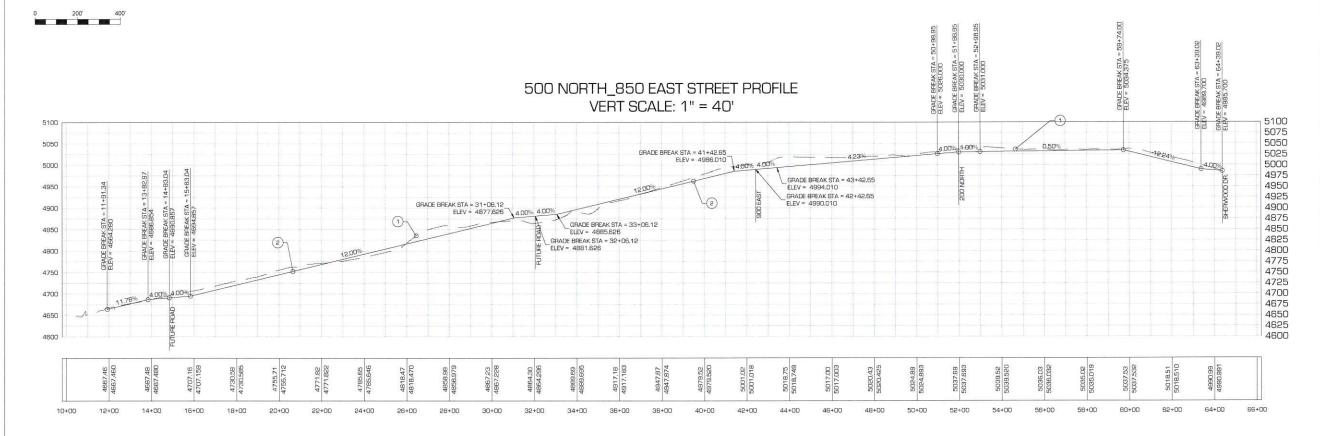


LITTLE BALDY PLACE SUBDIVISION STREET PLAN AND PROFILE

SCALE: 1"=200'



EXISTING GROUND.
 PROPOSED CENTERLINE



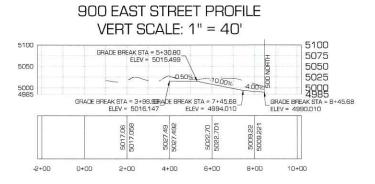
SHERWOOD DRIVE PROFILE VERT SCALE: 1" = 40' GRADE BREAK STA = 4+61.00 5050 GRADE BREAK STA = 3+14.04 ELEV = 4983.963 5000 3.47% GRADE BREAK STA = 1+35.06 4950 GRADE BREAK STA = 1+35.06 GRADE BREAK STA = 1+35.06 GRADE BREAK STA = 0+00.00 ELEV = 4966.271 GRADE BREAK STA = 0+00.00 ELEV = 4966.271 GRADE BREAK STA = 6+24.63 ELEV = 4968.218

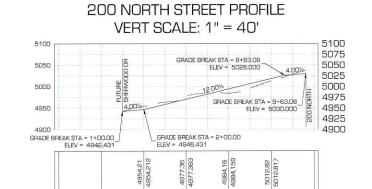
4+00

6+00

0+00

2+00





4+00

6+00

8+00

10+00

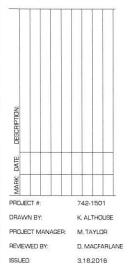


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STREET PROFILE

C-104

-2+00

0+00

2+00



1 SHEET KEY NOTES:

- INSTALL ASPHALT; 39' WIDTH; SEE CROSS SECTION DETAIL
- 1. INSTALL ASPIALL; 39 WIDH: SEE CHASS SECTION DETAIL SHEET C-100
 2. INSTALL STANDARD DUTY CONCRETE CROSS SECTION FOR COLLECTOR STREETS; SEE CROSS SECTION DETAIL SHEET C-100
 3. INSTALL 3' WIDE VALLEY GUTTER, AREAS WITH SLOPES EXCEEDING 30% (LOTS 36, 36, 39, AND 40) WILL REQUIRE ADDITIONAL GRADING TO GET SLOPES LESS THAN 30%
 4. EXISTING IRRIGATION PIPE TO REMAIN

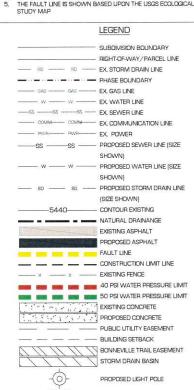
GENERAL NOTES:

- 1. POWER AND COMMUNICATION LINES ARE ASSUMED TO BE CONTAINED WITHIN THE SAME THENCH.
 2. STORM WATER WILL COLLECT IN GUTTERS ON THE SIDE OF EACH ROAD, BE COLLECTED IN STORM WATER INLET GRATE, AND BE CHANNELED TO THE NEAREST COLLECTION POND, AND THEN DRAINED AT A CONTROLLED RATE INTO THE CITY STORM WATER SYSTEM.

 3. BY STAMMING THIS DOCUMENT THE ENGINEER VERIFIES THAT ALL LOTS HAVE AN ADEQUATE BUILDABLE ENVELOPE WITH RESARDS TO HAZARIDOUS SLOPE, BUILDING, WATER, ZONING SETBACKS, ETC.

 4. ALL EXISTING POWER POLES TO REMAIN.

 5. THE FAULT LINE IS SHOWN BASED UPON THE USGS ECOLOGICAL STUDY MAP.





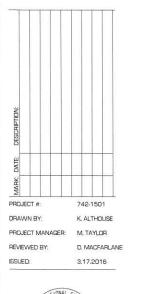
PROPOSED FIRE HYDRANT

SLOPES BETWEEN 20% AND 30% SLOPES GREATER THAN 30%



Ciuii





SUBDIVISION SLOPE ANALYSIS

March 9, 2016

E.S.R Committee Members Providence City Providence, UT 84332

RE: Little Baldy Place Water Model and Fire Flow Summary

Dear ESR Committee,

Per the request of the Providence City ESR the water system in the proposed Little Baldy Place has been modeled based upon static and dynamic flow data provided by Providence City Public Works Director Rob Stapley.

The water model software used is EPANET software. The lengths of pipes, type of pipe, size of pipe, elevations of nodes, loss coefficients in the lines, were modeled and calibrated to the two adjacent fire hydrants. The system was also calibrated according to a flow test performed by Rob Stapley on March 9th at hydrant 366, which is west of the Sherwood Drive – Eagle View intersection. The results of that flow test was 1500 gpm at hydrant 366 with a residual pressure measured at hydrant 105 at 72 psi.

A 1500 gpm fire flow demand was added to FH 366 and the system was modeled. Per State of Utah Administrative Code section R309-105-9-(2) (a) states that the minimum pressure in a water system during peak day demand and fire flow is 20 psi. Figure 2 below shows the pressure of all the nodes in the system during peak day demand and fire flow of 1500 gpm at FH 366. All nodes have pressures above 20 psi and the pressure at FH 105 is 74 psi, which is only 2 psi above the field measured residual. This level of accuracy is acceptable.

The peak day demand indoor and outdoor water use per the State of Utah Administrative Code section R309-510 were used and applied to certain nodes in the water model. The area to determine the peak day demand indoor use was set at 60% of the lot area as outlined in the Providence City Code. The summary of these demands is shown in the Figure 1 below.

Figure 1 Fire Flow Pressures at Fire Hydrani 366

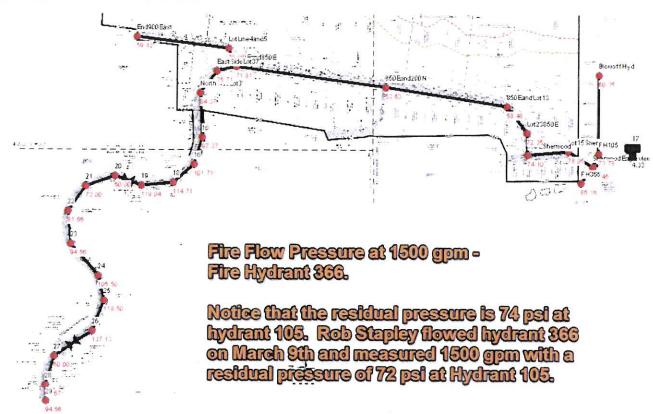


Table 1 Peak Day Demand

						PEAK	
					PEAK	DAY	TOTAL
			TOTAL		DAY IRR	INDOOR	PEAK
		TOTAL	EXECUTIVE	ESTIMATED	FLOW	USE	DAY
NODE	DESCRIPTION	LOT AREA	LOT AREA	IRR. AREA	(GPM)	(GPM)	DEMAND
1	North end of 900 East	1.18	7.73	5.35	21.17	0.56	21.73
2	Intersection of 850 East and 900 East	3.59	5.51	5.46	21.62	0.56	22.18
3	200 North Intersection	6.85	15.01	13.12	51.94	0.56	52.49
4	Sherwood and 850 East Intersection	5.97	12.06	10.82	42.84	0.56	43.39

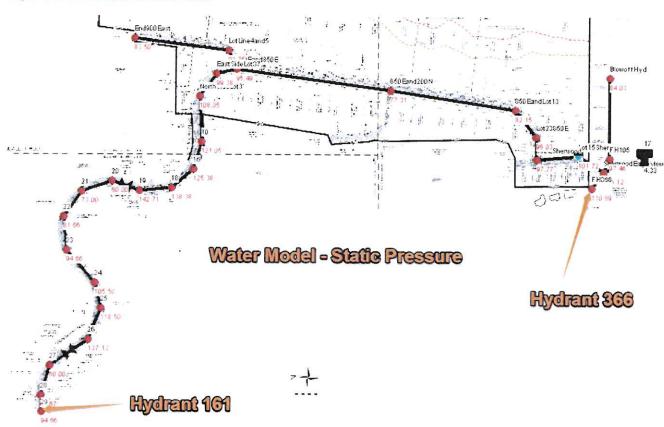
The water model was also calibrated according to static pressures measured at FH 366, 105, blow off at the top of Eagle View and FH 161. Figure 2 shows the static peak day demand pressures in the system. The static pressure at FH 366 in the model is 111 psi versus 111 psi measured in the field. The static pressure at FH 105 in the model is 98 psi versus 101 psi measured in the field. The static pressure at the blow off hydrant in the model is 84 psi versus 81 psi measured in the field. The static pressure at FH 161 in the model is 95 psi versus 94 psi as measured in the field. All modeled values are within 3 psi or less, which is an acceptable accuracy.

A fire flow analysis was performed at all the nodes along 900 East, 850 East and Sherwood Drive to determine the maximum fire flow combined with peak day demand at a minimum pressure of 20 psi in the system. The process was an iterative process to determine the correct fire flow to keep the system above 20

psi at all nodes. Table 2 below shows the results of the fire flow analysis listing the node location, the fire flow at a minimum pressure of 20 psi or greater and the total square footage of structure allowed based upon building type. One option for home owners is to install fire sprinklers in their homes, which allows for a 50% reduction of the fire flow requirement or to use Type V-A construction, which requires a 1 hour fire rating (see Appendix B of the International Fire Code).

Detailed maps illustrating the pressures at each node during the fire flow analysis can be found in the appendix of this memorandum.

Figure 2 Static Pressures in Water Model



Lable 2. Fire Flow and Allowable Structure Area

	ALLOWABLE FIRE FLOW @	1 AND 2 DWELLING HOMES FIRE FLOW REQ. UP TO 3600 SF	MAX ALLOWABLE STRUCTURE AREA AT FIRE FLOW (TYPE VB CONSTRUCTION)	ACCUMENTATION OF THE PROPERTY	MAX ALLOWABLE STRUCTURE AREA WITH TYPE VA
DESCRIPTION	20 PSI (GPM)	(GPM)	(SF)	SPRINKLERS (TYPE VB CONSTRUCTION) (SF)	CONSTRUCTION (SF)
End of 900 East	1,310	1,000	3,600	9,400	3,600
850 East 900 East Intersection	1,425	1,000	3,600	11,300	3,600
850 East 200 North Intersection	1,550	1,000	3,600	13,400	8,200
850 East Lot 13	1,850	1,000	4,800	18,000	10,900
Sherwood Drive 850 East Intersection	1,950	1,000	4,800	20,600	10,900
Sherwood Drive Lot 15	2,150	1,000	6,200	26,300	12,900

Based upon the data provided, the water model, the State Administrative Code, the International Fire Code and sound engineering judgement the proposed water system appears to have adequate fire flow and pressure as outlined in the document above. This analysis did not model the entire Providence City water system, but simply modeled the system with the available data.

Sincerely,

Danny Macfarlane, PE Civil Solutions Group

danny@civilsolutionsgroup.net

C: 435.760.7488

Appendix - Fire Flow Analysis Documents

